Rymer, Edwina

From: Dellinger, Philip

Sent: Tuesday, September 23, 2014 1:00 PM **To:** Honker, William; Garcia, David; Brown, Jamesr

Subject: FW: Request for Final NTW Review: NTW Project Topic # 2011-3 (Minimizing and

Managing Potential Impacts of Injection-Induced Seismicity from Class II Disposal

Wells

Attachments: Induced seismicity Report 9-18-14 Final for NTW Review inc Figs.pdf

A big step in finally being finished with this three year effort.

From: Hildebrandt, Kurt

Sent: Tuesday, September 23, 2014 9:31 AM

To: UIC National Technical Workgroup--State and EPA Members

Subject: Request for Final NTW Review: NTW Project Topic # 2011-3 (Minimizing and Managing Potential Impacts of

Injection-Induced Seismicity from Class II Disposal Wells

Please find attached a copy of an updated version of NTW Project Topic # 2011-3 (Minimizing and Managing Potential Impacts of Injection-Induced Seismicity from Class II Disposal Wells: Practical Approaches). Many of you on the NTW may remember that this work product (report) was reviewed and approved by a majority of the NTW membership back in late December of 2013. It was then forwarded to Ron Bergman the Director of Drinking Water Protection Division, Office of Ground Water and Drinking Water (OGWDW), in January of this year. In the time period since then, the report has undergone a peer review at the direction of OGWDW by an external group of six technical and/or subject matter experts from academia, researchers, and industry who were asked to provide feedback on the report.

Considering the uncertainty of external peer review comments with respect to the report as it had previously been approved, OGWDW and the Regional UIC managers decided early on that the NTW should conduct a final review of the report once it had been revised to incorporate the peer review comments, I've attached the original NTW review request (at the bottom of this email) to refresh the membership's memory about the report and to give some context to the new NTW members of what was involved in the development of the report.

After OGWDW received the peer reviewers' comments, a new comment review team consisting of Region 6 staff, myself, and two representatives of OGWDW was created to assess what had been provided by the peer reviewers. The comment review team carefully considered the comments relative to each topic and scope; and when appropriate, made the associated edits required to incorporate them into the report. The approach used by the comment review team in their assessment of the peer reviewer's comments can be found in the revised report starting on page six. The changes that were made did not alter the recommendations contained in the report.

In keeping with the wishes of OGWDW and the Regional UIC managers, I am requesting all of the members of the NTW review the report and then provide their vote (in case of the regions and Headquarters where there may be more than one person involved in the NTW, I need a vote from the lead member at those locations) on whether they still agree with the report's content, or not. If your vote is that you are not in agreement, an explanation of why you are not in agreement and what needs to be changed should be submitted. I will then provide any feedback and recommendations for changes received from the NTW back to the comment review team. Any final edits, if needed, will then be made by the comment review team. I will work to resolve any concerns that are raised by NTW members during this review process but if that isn't possible, the version of the report forwarded to Headquarters will represent the majority opinion of the voting members. A discussion of any minority opinion(s) will be included for Headquarters' consideration.

The report has concurrently been sent out to a technical editor who's been tasked with reviewing the report to correct any grammatical mistakes, misspellings, mistyping or incorrect punctuation and to ensure the consistent usage of terms. They will also correct any issues with indexing, headings and subheadings along with correcting errors in citations. This was done in an effort to save time and any changes that would be made by the technical editor will not alter the overall content or recommendations contained in the report.

I would like your vote and any comments on the report back to me by no later than **October 10, 2014**. I will then compile the results and provide a summary back to the NTW. If we need to discuss issues, we will do that either as part of the October NTW conference call or a separate call devoted to the report. If you have any problems opening the file, received this email without an attachment or have questions concerning the report or the voting process, please contact me. Also, as with any draft NTW work product, I would ask that you not distribute it outside of the NTW membership and their management until it has gone final.

Regards, Kurt

Kurt F. Hildebrandt

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Voice: **913-551-7413** FAX: **913-551-9413**

Original email asking of NTW Review and Opinion:

I am pleased to transmit the draft final version of the Underground Injection Control Program National Technical Workgroup (NTW) Project Topic # 2011-3 - Minimizing and Managing Potential Impacts of Injection-Induced Seismicity from Class II Disposal Wells: Practical Approaches to the NTW as a whole for your review and comment. This work product is result of an assignment given the NTW on July 20, 2011, by Ann Codrington, Director, Drinking Water Protection Division, Office of Ground Water and Drinking Water and represents the efforts of a Working Group (WG) which consisted of NTW members along with UIC staff from EPA Headquarters, regions and State Agencies. In addition to the members of the WG, technical and/or subject matter experts from state agencies, academia, researchers, and industry were consulted and participated in discussions or provided feedback on various aspects of the draft report.

The strategy adopted by the WG for this project is described in detail in the report but included sections discussing the three key components for disposal induced seismicity from both a geoscience and petroleum engineering framework. Four case study focus areas were assessed forming the basis of a decision model that provides a practical tool for addressing concerns about induced seismicity by UIC Directors. Additionally the report contains an extensive scientific literature review.

The development process of the work product involved several draft iterations over a period of time. The first draft was sent to the WG for review and comment on December 21, 2011. In May 2012 at the request of HQ, the United States Geological Survey (USGS) reviewed and provided comments on the draft report. The comments which were received from the WG and USGS were incorporated into the report. On November 30, 2012, the report was then sent back to the WG and to the expert panel for review and comment. All comments which were received during the various review periods were considered. The WG has completed their review of the comments and making the associated edits and has submitted the report for final NTW review and approval.

As per the NTW charter, before the work product can be called final and forwarded on to EPA's UIC Management, the members of the NTW will need to review it and then provide their vote (in the case of each region and Headquarters this would be from the lead member) on if they are in agreement with the findings contained in the work product or if they are not in agreement, an explanation of why and what needs to be changed. We will work to resolve any concerns that are raised by NTW members during this review process but if that isn't possible, the final work product that will be forwarded to UIC Management at Headquarters and the regions for their consideration will represent the majority opinion of the members after voting and will also include a discussion of the minority opinion(s).

I would like your vote and any comments on the report back to me by no later than January 15, 2014. I will then compile the results and provide a summary back to the group. If we need to discuss issues, we will do that as part of the NTW meeting at the GWPC meeting the week of January 20, 2014. If you have any problems accessing the files from the FTP site or questions concerning this work product or the voting process, please contact me.

Thanks, Kurt

End of Original email